

VCU 02-14

10/565,852

02940323aa

Amendment dated 09/17/2007

Reply to office action mailed 06/15/2007

The following is a complete listing of all claims in the application, with an indication of the status of each:

Listing of claims:

- 1 1. (currently amended) An apparatus for measuring intra cranial pressure,
2 comprising:
3 an acoustic eye patch conformably adapted to an eyeball of a patient,
4 said eye patch having sensors for measuring acoustic signals in the brain;
5 a sweep generator for applying acoustic signals to the brain across the
6 skull of the patient, said signals sweeping a predetermined range;
7 an analyzer for determining from an output of the acoustic eye patch
8 an intra cranial pressure.

- 1 2. (original) The apparatus of claim 1, wherein said predetermined range is
2 an ultrasonic resonance range and said analyzer determines a resonant
3 frequency and a degree of damping of the acoustic signal at said resonant
4 frequency, and wherein said degree of damping is correlated to a measure of
5 intra cranial pressure.

- 1 3. (currently amended) The apparatus of claim 1, wherein the acoustic eye
2 patch is adapted to be applied to both eyeballs of the patient.

- 1 4. (original) The apparatus of claim 2, wherein the predetermined resonance
2 range is 20-175 kHz.

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1 5. (original) The apparatus of claim 1, wherein the acoustic eye patch sensor
2 is a piezoelectric film.

1 6. (original) The apparatus of claim 3, wherein the analyzer determines
2 coherence between eyeballs of the patient.

1 7. (original) The apparatus of claim 1, wherein said predetermined range
2 includes frequencies less than 20 kHz and said analyzer detects retinal artery
3 pulsations, and wherein pressure is applied to the eye until the retinal artery
4 pulsations disappear, said applied pressure being a measure of intra cranial
5 pressure.

1 8. (currently amended) A method for determining intra cranial pressure,
2 comprising the steps of:

3 conformably adapting an acoustic eye patch to an eyeball of a patient,
4 said eye patch having sensors for measuring acoustic signals in the brain;

5 applying acoustic signals to the brain across the skull of the patient,
6 said signals sweeping a predetermined range;

7 determining from an output of the acoustic eye patch an intra cranial
8 pressure.

1 9. (original) The method of claim 8, wherein said predetermined range is an
2 ultrasonic resonance range and said analyzer determines a resonant frequency
3 and a degree of damping of the acoustic signal at said resonant frequency, and
4 wherein said degree of damping is correlated to a measure of intra cranial
5 pressure.

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1 10. (original) The method of claim 8, wherein the acoustic eye patch is
2 applied to both eyeballs of the patient.

1 11. (original) The method of claim 9, wherein the predetermined resonance
2 range is 20-175 kHz.

1 12. (original) The method of claim 8, wherein the acoustic eye patch sensor
2 is a piezoelectric film.

1 13. (original) The method of claim 10, wherein the analyzer determines
2 coherence between eyeballs of the patient.

1 14. (original) The method of claim 8, wherein said predetermined range
2 includes frequencies less than 20 kHz and said analyzer detects retinal artery
3 pulsations, and wherein pressure is applied to the eye until the retinal artery
4 pulsations disappear, said applied pressure being a measure of intra cranial
5 pressure.